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THE PENNSYLVANIA ENERGY ABSTRACT
SECOND ANNUAL

WINTER 1979-80

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PREFACE

The Governor's Energy Council has compiled some of our most requested data into the Second Annual Pennsylvania Energy Abstract in order to provide energy information to support the Commonwealth's energy policy and programs. The endeavor followed the development of the Commonwealth Energy Data Source Book which surveys existing sources of energy information. From these sources large quantities of data and information were collected and synthesized to develop and empirical compendium of Pennsylvania's energy situation. This compendium was developed into The Pennsylvania Energy Primer.

SCOPE

Within the time limitations and manpower constraints imposed on this publication, the format has been redeveloped to include the most accurate representation of the production, consumption and distribution of Pennsylvania's energy resources. The tables were compiled directly from primary sources. Unavailable data was not substituted with estimations. All tables are Pennsylvania specific.

FUEL QUANTITIES

Fuel quantities used in this abstract are defined as follows:

Coal and Coke
Short ton — 2000 pounds

Natural Gas
MCF — thousand cubic feet
(both at 14.73 psia.)
MMCF — million cubic feet
BTU — (British Thermal Unit) heat required to raise the temperature of one pound of water one degree Fahrenheit.

Petroleum
Barrels — 42 U.S. gallons

Electricity
KW — thousand watts
KWH — thousand watt demand over a period of one hour

ANNUAL EDITIONS

It is our intention to expand and update this abstract on an annual basis.

COMMENTS

The Governor's Energy Council would appreciate receiving any comments regarding errors in this publication, primary data sources we have neglected, and other tables that you would like to have included in subsequent editions.

THE PENNSYLVANIA ENERGY ABSTRACT
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COAL

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PRODUCTION OF ANTHRACITE, BY COUNTY
(thousand short tons)

	1976	1977	1978
Berks & Snyder	75	149+	–
Carbon	300	167	129
Columbia	101	39	57
Dauphin	61	59	30
Lackawanna	214	227	80
Luzerne	1,554	1,229	1,319
Northumberland	892	863	683
Schuylkill	2,973	3,128	2,548
Sullivan	58	–	190●
TOTAL*	**6,228**	**5,861**	**5,036**

*Data may not sum to total because of independent rounding.
●Includes Bradford.

REFERENCE: 7,5

CONSUMPTION OF ANTHRACITE IN THE UNITED STATES, BY SECTOR

(thousand short tons)

	1976	1977
Residential & Commercial Heating*	2,016	1,934
Colliery Fuel	12	10
Electric Utilities	1,350	1,426
Iron & Steel	520	514
Other*	1,142	919
TOTAL+	**5,040**	**4,803**

*Estimate.

+Consumption of anthracite by Clement Plants has been withheld to avoid disclosing individual company confidential data.

REFERENCE: 7

PRODUCTION OF BITUMINOUS, BY COUNTY

(thousand short tons)

County	1976	1977	1978
Allegheny	3,924	3,621	2,718
Armstrong	7,727	7,504	6,424
Beaver	188	201	273
Bedford	104	163	116
Blair	1	31	33
Butler	1,325	1,587	2,013
Cambria	7,884	6,762	5,835
Centre	1,215	1,268	1,147
Clarion	5,197	5,785	5,828
Clearfield	8,311	9,300	9,933
Clinton	391	539	614
Elk	674	784	752
Fayette	3,127	3,196	2,821
Fulton	13	14	24
Greene	7,985	7,085	6,614
Huntingdon	4	4	70
Indiana	10,802	10,535	9,412
Jefferson	2,488	3,221	3,777
Lawrence	690	784	961
Lycoming	490	481	321
Mercer	400	345	372
Somerset	6,387	7,086	6,276
Tioga	630	681	588
Venango	541	870	1,429
Washington	12,446	11,194	9,447
Westmoreland	2,804	3,383	2,544
TOTAL	**85,748**	**86,424**	**80,342**

REFERENCE: 5

CONSUMPTION OF BITUMINOUS, BY SECTOR
(thousand short tons)

	1976	1977	1978
Electric Utilities	37,249	35,785	31,630
Coke & Gas Plants	23,281	20,948	18,536
Retail Dealers	192	122	192
Other	3,870	3,993	4,151
TOTAL	**64,592**	**60,848**	**54,509**

REFERENCE: 6

NATURAL GAS

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MARKETED PRODUCTION AND VALUE OF NATURAL GAS

	1976	1977	1978
Quantity (MMCF)	89,386	91,717	97,763
Value (Thousand dollars)	61,229	73,374	84,076
Average Wellhead Value (cents per MCF)	68.5	80.0	86.0

REFERENCE: 11

NATURAL GAS FLOWS
(MMCF)

	1976	1977	1978
Total Receipts (pipelines entering Pa. from W.Va., Md., Ohio)	1,728,941	1,665,935	1,667,275
Total Deliveries (pipelines leaving Pa. to N.Y., N.J., Del.)	1,178,012	1,014,084	1,065,881
Net Receipts (+) or deliveries (-)	550,929	651,851	601,394
Net Pa. Production	89,386	91,717	97,763
Total New Gas Available	640,315	743,568	699,157
Addition to (-) or removal from (+) Storage	-88,149	+67,564	+26,095
Unaccounted for and Trans. Loss (-)*	+14,885	+7,622	-772
Consumption	713,579	668,337	673,770
Extraction Loss	61	45	64
Pipeline Fuel	21,574	23,237	24,461
Lease & Plant Fuel	3,043	3,210	2,134
Total Delivered to Customers	**668,901**	**641,890**	**647,175**

*Includes transmission losses, changes in aboveground storage and gas unaccounted for.

REFERENCE: 11

CONSUMPTION OF NATURAL GAS, BY SECTOR
(MMCF)

	1976	1977	1978
Residential	290,439	277,340	286,163
Commercial	116,747	104,617	105,277
Industrial*	273,464	252,341	249,953
Electric Utility	481	324	439
Other+	7,770	7,268	5,343
Total Delivered to Customers (MMCF)	688,901	641,890	647,175
Extraction Loss	61	45	64
Pipeline Fuel	21,574	23,237	24,461
Lease and Plant Fuel	3,043	3,120	2,134
Total Consumption	713,579	688,382	647,175

*Includes refinery fuel use.
+Includes deliveries to municipalities, and public authorities for institutional heating, street lighting, etc.

REFERENCE: 11

AVERAGE GAS UTILITY INDUSTRY CUSTOMERS, BY CUSTOMER CLASS
(thousands)

	1976	1977	1978
Residential	2,175.8	2,155.7	2,153.8
Commercial	142.7	142.6	140.7
Industrial*	6.4	6.4	6.1
Other	2.2	2.3	2.4
TOTAL	**2,327.1**	**2,307.0**	**2,303.0**

*Includes electric generation.

REFERENCE: 1

GAS UTILITY INDUSTRY CONSUMPTION PER CUSTOMER, BY CUSTOMER CLASS*

(MMBtu/Customer)

	1976	1977	1978
Residential	142.5	140.5	141.9
Commercial	817.7	732.4	763.0
Industrial+	39,674.8	35,034.2	42,210.1
Other	4,434.5	4,538.0	4,310.5
TOTAL	**296.3**	**278.1**	**295.2**

*Excludes customer purchasing for resale and sales for resale. Customer data is based on yearly averages.

+Includes Electric Generation.

REFERENCE: 1

PETROLEUM

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PRODUCTION AND VALUE OF CRUDE PETROLEUM

	1976	1977	1978
Quantity (thousand barrels)	3,019	2,715	2,887
Total Value Wells (thous. dollars)	36,700	38,810	42,641
Average Value per Barrel (dollars)	12.16	14.29	14.77
Number of Producing Wells	28,805	28,400	27,768
Average Production per Day per Well (Barrels)*	0.3	0.3	0.3

* Based upon the average number of wells producing at the beginning and at the end of the year.

REFERENCE: 9

CONSUMPTION OF REFINED PRODUCTS BY SECTOR
(thousand barrels)

	1976	1977	1978
Residential and Commercial			
Kerosene	2,494	2,102	1,887
Distillate Fuel Oil	43,374	42,665	40,459
Residual Fuel Oil	12,239	10,624	9,545
L. P. Gases	2,608	2,709	2,489
TOTAL	**60715**	**58,100**	**54,380**
Industrial			
Kerosene	1,111	468	NA
Distillate Fuel Oil	5,322	6,271	5,498
Residual Fuel Oil	9,692	12,183	13,021
L. P. Gases	1,356	1,422	2,125
TOTAL	**17,481**	**20,344**	—
Transportation			
Gasoline	119,191	122,553	124,270
Jet Fuel	7,508	7,458	7,765
L. P. Gases	424	17,402	398
TOTAL	**127,123**	**147,413**	**132,433**
Electric Power			
Distillate Fuel Oil	3,734	5,138	3,370
Residual Fuel Oil	13,973	21,609	25,797
TOTAL	**17,707**	**26,747**	**29,167**
Miscellaneous			
Distillate Fuel Oil	NA	714	202
Residual Fuel Oil	238	299	271
L. P. Gases	345	436	386
TOTAL	**60,715**	**1,449**	**859**

REFERENCE: 2, 13, 14

SALES OF LIQUIFIED PETROLEUM GASES, BY SECTOR
(thousand gallons)

	1976	1977	1978
Residential and Commercial			
Propane	108,962	113,592	104,368
Butane Propane Mixture	574	202	201
TOTAL	**109,536**	**113,794**	**104,569**
Internal Combustion Engine Fuel			
Propane	17,812	18,979	16,729
Industrial uses*			
Propane	51,906	55,661	82,663
Butane	1,834	2,369	4,616
Butane-Propane Mixture	3,244	1,727	1,989
TOTAL	**56,984**	**59,757**	**89,268**
Utility Gas			
Propane	35,728	42,504	45,567
Miscellaneous Uses+			
Propane	14,487	18,325	16,223
GRAND TOTAL	**234,547**	**253,359**	**272,356**

*Includes refinery fuel.

+Includes secondary recovery of petroleum, agricultural uses, and use as synthetic natural gas feedstock.

REFERENCE: 14

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FUEL CONSUMPTION BY ELECTRIC UTILITIES, BY TYPE OF FUEL AND PRIME MOVER

	1976	1977	1978
Coal (Short Tons)	37,446,652	36,451,090	36,638,978
Fuel (Barrels)	17,600,359	25,150,005	29,926,248
Steam	14,667,787	21,566,838	26,234,089
Turbine & Internal Combustion	2,932,572	3,583,167	3,692,159
Natural Gas (MCF)	480,225	323,240	448,822
Steam	61,608	16,536	25,098
Turbine & Internal Combustion	418,617	306,704	413,724

REFERENCE: 12

COAL DELIVERIES AND PRICES TO STEAM ELECTRIC PLANTS 25 MW OR GREATER, BY STATE OF ORIGIN*

State of Origin	1976	1977	1978
Maryland			
Quantity (thousand tons)	82.3	5,156.2	4,473.9
Avg. Delivered Price ($/ton)	21.85	27.78	30.41
Pennsylvania			
Quantity	31,408.8	37,977.9	33,644.5
Avg. Delivered Price	23.27	29.27	33.73
West Virginia			
Quantity	5,296.6	28,508.3	26,006.0
Avg. Delivered Price	23.57	29.57	32.80
Kentucky			
Quantity	186.4	15,822.4	24,142.9
Avg. Delivered Price	36.90	27.86	33.34
Ohio			
Quantity	437.26	53,055.3	46,534.3
Avg. Delivered Price	22.26	25.35	30.30
TOTAL			
Quantity	**37,411.9**	**150,520.0**	**134,801.6**
Avg. Delivered Price	**23.37**	**27.97**	**32.12**

REFERENCE: 8

AVERAGE COST, HEAT CONTENT AND PRODUCTION EFFICIENCES OF ELECTRIC UTILITY FUELS*

	1976	1977	1978
Coal+			
Cost/Million BTU consumed (cents)	100.3	104.9	121.8
Cost/Short Tons	23.82	24.9	28.8
BTU/pound	11,881	11,857	11,824
Oil☆			
Cost/Million BTU consumed (cents)	211.4	224.5	233.5
Cost/Barrel (dollar)	12.76	13.6	14.6
BTU/gallon	143,689	144,017	144,336
Gas●			
Cost/Million BTU consumed (cents)	133.6	176.5	191.8
Cost/MCF (cents)	133.7	176.5	191.8
BTU/cf	1,001	1,000	1,000
Composite Average			
Cost/Million BTU consumed (cents)	111.9	123.6	140.8
Cost/net KWH (cents)	1.15	1.3	1.5
BTU/net KWH	10,288	10,534	10,525

*Fuels burned under boilers and by internal combustion engines.

+Includes anthracite and bituminous and may include relatively small amounts of coke, lignite and wood.

☆Includes fuel oils and may include small amounts of tar and gasoline.

●Includes natural, manufactured, and waste gas.

REFERENCE: 3

INSTALLED NAMEPLATE GENERATING CAPACITY, BY TYPE OF PRIME MOVER, DECEMBER 31

(thousand KWH)

	1976	1977	1978*
Total Industry			
Conventional Steam	24,033	26,308	26,388
Nuclear Steam	4,163	4,198	5,159
Internal Combustion	98	93	89
Hydro	1,651	1,651	1,651
TOTAL	**29,945**	**32,250**	**33,287**
Investor-Owned Utility			
Conventional Steam	24,026	26,301	26,381
Nuclear Steam	4,163	4,198	5,159
Internal Combustion	92	92	88
Hydro	1,651	1,651	1,651
TOTAL	**29,932**	**32,242**	**33,279**

*Preliminary Data

REFERENCE: 3

NET GENERATION OF ELECTRICITY, BY TYPE OF PRIME MOVER
(Million KWH)

	1976	1977	1978*
Total Steam+	113,517	115,588	121,797
Fossil	97,090	97,767	99,468
Nuclear	16,427	17,821	22,329
Gas Turbine			
Internal Combustion	24	24	21
Hydro	1,417	1,207	760
TOTAL+	**114,958**	**116,819**	**122,578**

*Preliminary data.

+Data may not sum up to totals because of independent rounding or omitted categories.

REFERENCE: 3

ENERGY SALES BY ELECTRIC UTILITIES, BY CUSTOMER CLASS

(million KWH)

	1976	1977	1978
Total Industry			
Residential	28,790	30,346	30,961
Total Commercial & Industrial	61,258	63,660	65,230
Small Light & Power	17,892	18,805	19,259
Large Light & Power	43,366	44,855	45,971
Street & Highway Lighting	527	533	541
Other Public Authorities	357	355	366
Railroads & Railways	964	1,029	968
Inter-Department	65	65	67
Total to Ultimate Customers	**91,961**	**95,988**	**98,133**
Investor Owned Utilities			
Residential	27,455	28,906	29,460
Total Commercial & Industrial	60,610	63,019	64,573
Small Light & Power	17,535	18,438	18,876
Large Light & Power	43,075	44,580	45,697
Street & Highway Lighting	515	523	530
Other Public Authorities	336	339	350
Railroads & Railways	964	1,029	968
Inter-Department	61	60	63
Total to Ultimate Customers	**89,941**	**93,875**	**95,944**

REFERENCE: 3

NUMBER OF ULTIMATE ELECTRIC UTILITY CUSTOMERS, BY CUSTOMER CLASS DECEMBER 31

Total Industry	1976	1977	1978
Residential	3,992,793	4,044,795	4,098,787
Total Commercial and Industrial	465,198	468,416	474,282
Small Light & Power	434,565	437,790	443,604
Large Light & Power	30,633	30,626	30,678
Street & Highway Lighting	5,587	5,974	5,942
Other Public Authorities	3,596	3,652	3,660
Railroads & Railways	4	4	4
Inter-Department	14	13	13
TOTAL	**4,467,192**	**4,522,854**	**4,582,688**
Investor-Owned Utilities			
Residential	3,804,309	3,853,619	3,902,791
Total Commercial and Industrial	449,612	452,602	458,283
Small Light & Power	419,620	422,592	428,221
Large Light & Power	29,992	30,010	30,062
Street & Highway Lighting	5,516	5,903	5,871
Other Public Authorities	3,481	3,537	3,545
Railroads & Railways	4	4	4
Inter-Department	2	2	1
TOTAL	**4,262,924**	**4,315,667**	**4,370,495**

REFERENCE: 3

MISCELLANEOUS

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1976 PENNSYLVANIA ENERGY CONSUMPTION (10^{12} BTU'S)
SECTOR

Fuel Type	Electric Utilities	Residential	Commercial	Industrial	Transportation	Total
Residual	87.85		76.95	115.67	40.76	321.13
Distillate	21.75	174.33	78.32	38.13	30.33	342.86
Coal	909.78	25.45	16.54	134.93		1,086.70
Natural Gas	.50	299.73	128.50	285.36	22.26	736.35
Nuclear	172.48					172.48
Hydro	14.72					14.72
Electricity Sales[1]	313.77					
LPG		9.41	1.05	11.67	.27	22.40
Kerosene		20.44				20.44
Elec. Purchased[1]		98.23	64.29	147.96	3.29	313.77
Asphalt & Road Oil			43.03			43.03
Diesel				15.21	77.00	92.21
Coking Coal				628.59		628.59
Special Fuels				135.16		135.16
Jet Fuel					40.97	40.97
Gasoline			5.09	5.79		10.88
Gasoline-Aviation					1.42	1.42
Gasoline-Highway					610.28	610.28
Gasoline-Marine					2.38	2.38
Total	**1,207.08**	**529.36**	**349.48**	**1,370.41**	**825.67**	**4,282.00**
Column Total		**627.60**	**413.76**	**1,518.37**	**328.96**	

(1) not included in overall totals.

REFERENCE: 10

1977 PENNSYLVANIA ENERGY CONSUMPTION (10^{12} BTU'S)
SECTOR

Fuel Type	Electric Utilities	Residential	Commercial	Industrial	Transportation	Total
Residual	135.86		76.20	136.71	40.29	389.06
Distillate	29.93	169.44	76.12	52.31	26.02	353.82
Coal	870.56	25.80	16.88	151.29		1,064.53
Natural Gas	.33	286.21	115.47	263.73	23.98	689.72
Nuclear	187.12					187.12
Hydro	12.54					12.54
Electricity Sales[1]	327.51					
LPG		9.78	1.09	13.04	.29	24.20
Kerosene		14.57				14.57
Elec. Purchased[1]		103.54	67.41	153.05	3.51	327.51
Asphalt & Road Oil			47.71			47.71
Diesel				19.08	82.29	101.37
Coking Coal				565.50		565.60
Special Fuels				139.71		139.71
Jet Fuel					41.05	41.05
Gasoline			6.39	5.42		11.81
Gasoline-Aviation					1.42	1.42
Gasoline-Highway					623.63	623.63
Gasoline-Marine					2.43	2.43
Total	**1,236.34**	**505.80**	**339.86**	**1,346.88**	**841.41**	**4,270.29**
Column Total		**609.34**	**407.27**	**1,499.93**	**844.92**	

(1) Not included in overall totals.

REFERENCE: 10

COST, QUANTITIES, AND UNIT COSTS OF PURCHASED FUELS AND ELECTRICITY FOR PENNSYLVANIA MANUFACTURERS
BY INDUSTRY GROUPS, 1976

	Total*	Electricity	Coal	Coke	Fuel Oil	Natural Gas	Propane	Other Fuels+
Total, Pennsylvania								
Cost (thousand dollars)	2,220,062	778,282	231,068	222,379	446,744	459,499	17,231	64,860
Quantity☆	–	30,775	7,004	3,828	33,383	305	51,055	–
Average Cost (dollars per dollars)	–	25.2	32.9	58.1	13.3	1.5	0.3	–
Food & Kindred Products								
Cost	136,706	54,853	1,950	0	54,823	18,373	1,895	4,811
Quantity	–	1,702	43	0	3,976	9	5,828	–
Average Cost	–	32.2	45.0	0	13.7	1.9	0.3	–
Tobacco Manufacturers								
Cost	1,872	966	0	0	821	83	2	0
Quantity	–	33	0	0	58	0	3	–
Average Cost	–	29.0	0.0	0.0	14.2	1.7	0.5	–
Textile Mill Products								
Cost	46,594	19,888	705	0	18,741	5,328	832	1,100
Quantity	–	694	18	0	1,389	2	3,051	–
Average Cost	–	28.6	40.2	0.0	13.4	2.2	0.2	–
Apparel & Other Finished Products								
Cost	29,030	13,333	1,129	0	11,176	2,327	292	772
Quantity	–	324	12	0	656	1	708	–
Average cost	–	41.2	94.8	0.0	17.0	2.1	0.4	–
Lumber & Wood Products								
Cost	13,608	6,188	281	0	4,091	1,542	719	787
Quantity	–	202	6	0	221	1	1,843	–
Average Cost	–	30.6	46.0	0.0	18.5	1.4	0.3	–
Furniture & Fixtures								
Cost	9,295	4,614	393	0	1,836	2,269	100	82
Quantity	–	129	10	0	117	1	293	–
Average Cost	–	35.8	37.8	0.0	15.6	2.1	0.3	–

—continued—

	Total*	Electricity	Coal	Coke	Fuel Oil	Natural Gas	Propane	Other Fuels+
Paper & Allied Products								
Cost	115,253	40,599	16,262	0	44,092	13,152	531	253
Quantity	–	1,747	712	0	3,405	8	1,579	–
Average Cost	–	23.2	23.3	0.0	12.9	1.5	0.3	–
Printing Publishing & Allied Products								
Cost	27,137	16,754	15	0	5,014	2,429	136	2,790
Quantity	–	471	0	0	255	1	346	–
Average Cost	–	35.5	145.0	0.0	19.6	2.0	0.3	–
Chemical & Allied Products								
Cost	149,067	53,519	12,832	0	49,565	28,930	1,016	3,205
Quantity	–	1,814	573	0	3,959	28	3,264	–
Average Cost	–	29.5	22.4	0.0	12.5	1.0	0.3	–
Petroleum Refining & Related Ind.								
Cost	79,208	31,578	5,269	0	13,929	26,717	170	1,546
Quantity	–	1,328	215	0	1,253	18	489	–
Average Cost	–	23.7	24.4	0.0	11.1	1.1	0.3	–
Rubber & Miscellaneous Products								
Cost	43,559	26,093	1,082	0	11,392	4,828	114	49
Quantity	–	984	33	0	899	3	283	–
Average Cost	–	26.5	33.3	0.0	12.6	1.7	0.4	–
Leather & Leather Products								
Cost	5,159	2,902	705	0	1,100	436	13	3
Quantity	–	96	28	0	78	0	29	–
Average Cost	–	29.6	25.5	0.0	14.1	1.5	0.4	–
Stone, Clay, Glass & Concrete Products								
Cost	185,124	54,295	34,934	1,850	26,679	63,281	1,814	2,272
Quantity	–	2,492	1,472	52	1,865	42	4,453	–
Average Cost	–	21.7	23.7	35.5	14.3	1.5	0.4	–

—continued—

	Total*	Electricity	Coal	Coke	Fuel Oil	Natural Gas	Propane	Other Fuels+
Primary Metal Industries								
Cost	1,017,137	269,188	147,664	216,382	129,518	210,080	1,858	42,448
Quantity	—	12,181	3,578	3,741	10,063	140	5,988	—
Average Cost	—	22.1	41.2	57.8	12.8	1.5	0.3	—
Fabricated Metal Products								
Cost	145,082	58,179	1,177	2,559	35,613	40,435	4,182	2,938
Quantity	—	1,982	30	21	2,461	24	11,828	—
Average Cost	—	29.3	39.8	121.2	14.4	1.7	0.3	—
Machinery Except Electrical								
Cost	78,097	45,122	433	1,015	14,011	14,685	2,091	740
Quantity	—	1,559	9	9	938	9	6,459	—
Average Cost	—	28.9	47.0	116.6	14.9	1.7	0.3	—
Electrical Equipment & Supplies								
Cost	66,709	40,668	1,673	567	9,999	12,823	660	320
Quantity	—	1,686	50	5	740	7	2,113	—
Average Cost	—	24.0	33.3	120.6	13.5	1.7	0.3	—
Transportation Equipment								
Cost	44,950	24,211	4,119	7	8,015	7,301	604	693
Quantity	—	857	215	0	583	4	1,995	—
Average Cost	—	28.2	19.1	70.0	13.7	1.9	0.3	—
Instrument & Related Products								
Cost	12,778	9,091	0	0	1,489	2,153	39	5
Quantity	—	302	0	0	102	1	79	—
Average Cost	—	30.0	0.0	0.0	14.5	1.8	0.5	—
Miscellaneous Mfg. Ind.								
Cost	13,698	6,241	82	0	4,840	2,327	162	46
Quantity	—	190	1	0	367	1	425	—
Average Cost	—	32.9	58.7	0.0	13.2	2.0	0.3	—

* Data may not sum to totals because of independent rounding.
\+ Other fuels include gasoline, kerosene, steam and all others.
☆ Quantities for fuels are: electricity — million KWH, coal and coke — thousand short tons, fuel oil — thousand barrels, natural gas — million Mcf, propane — thousands of gallons.
— None reported

REFERENCE: 4

COSTS, QUANTITIES, AND UNITS COSTS OF PURCHASED FUELS AND ELECTRICITY FOR PENNSYLVANIA MANUFACTURERS
BY UNIFORM REGIONS, PHILADELPHIA AND ALLEGHENY COUNTIES, 1976

Uniform Regions	Total*	Electricity	Coal	Coke	Fuel Oil	Natural Gas	Propane	Other Fuels+
Total, Pennsylvania								
Cost (thousand dollars)	2,220,062	778,282	231,068	222,379	446,744	459,499	17,231	64,360
Quantity☆	—	30,775	7,004	3,828	33,383	305	51,055	—
Average Cost (dollars per unit)	—	25.2	32.9	58.1	13.3	1.5	0.3	—
Delaware Valley								
Cost	601,719	220,821	45,281	23,463	195,693	93,725	5,656	17,080
Quantity	—	7,430	857	386	14,721	54	16,662	—
Average Cost	—	29.7	52.8	60.8	13.2	1.7	0.3	—
Lehigh Valley								
Cost	174,957	69,365	23,578	4,348	53,458	20,676	1,471	2,062
Quantity	—	2,844	831	54	4,092	9	4,551	—
Average Cost	—	24.3	28.3	80.9	13.0	2.2	0.3	—
Northeastern District								
Cost	82,971	36,413	8,952	434	17,925	16,028	1,471	1,742
Quantity	—	1,338	277	3	1,159	9	4,953	—
Average Cost	—	27.2	32.3	127.6	15.4	1.7	0.3	—
Northern Tier District								
Cost	25,625	13,444	258	908	3,060	7,270	664	21
Quantity	—	655	12	7	235	6	1,728	—
Average Cost	—	20.5	22.3	129.7	13.0	1.2	0.3	—
Seda Cog District								
Cost	77,541	32,214	8,950	10	18,162	15,787	1,899	520
Quantity	—	1,327	414	0	1,251	8	5,313	—
Average Cost	—	24.2	21.6	102.0	14.5	1.8	0.3	—
Capital Region								
Cost	200,938	90,917	12,588	2,545	50,300	37,212	3,425	3,950
Quantity	—	3,599	370	44	3,763	18	10,069	—
Average Cost	—	25.2	33.9	57.9	13.3	2.0	0.3	—

—continued—

Uniform Regions	Total	Electricity	Coal	Coke	Fuel Oil	Natural Gas	Propane	Other Fuels+
Southern Alleghenies District								
Cost	38,949	18,288	2,445	129	4,200	12,710	525	653
Quantity	—	784	107	1	283	9	1,651	—
Average Cost	—	23.3	22.8	116.9	14.8	1.4	0.3	—
North Central District								
Cost	39,241	16,117	4,394	0	2,498	15,968	26	238
Quantity	—	813	187	0	170	11	63	—
Average Cost	—	19.8	23.5	0.0	14.6	1.4	0.4	—
Northwestern District								
Cost	195,426	58,467	15,797	51,177	15,559	52,917	404	1,105
Quantity	—	2,374	819	595	1,297	35	1,178	—
Average Cost	—	24.6	19.2	86.0	11.9	1.5	0.3	—
Southwestern District								
Cost	782,695	222,234	108,827	139,365	85,890	187,206	1,684	37,489
Quantity	—	9,610	3,132	2,738	6,411	146	4,888	—
Average Cost	—	23.1	34.7	50.8	13.4	1.2	0.3	—
Philadelphia County								
Cost	199,188	69,687	17,318	572	89,945	14,120	1,517	6,030
Quantity	—	2,162	319	5	6,409	7	5,609	—
Average Cost	—	32.2	54.2	121.7	14.0	2.1	0.2	—
Allegheny County								
Cost	415,090	112,460	19,325	119,128	41,164	90,977	534	31,502
Quantity	—	4,309	552	2,417	2,979	80	1,208	—
Average Cost	—	26.1	35.0	49.2	13.8	1.1	0.4	—

* Data may not sum to totals because of independent rounding.
\+ Other fuels include gasoline, kerosene, steam and all others.
☆ Quantities for fuels are: electricity — million KWH, coal and coke — thousand short tons, fuel oil — thousand barrels, natural gas — million Mcf, propane — thousands of gallons.
— None reported.

REFERENCE: 4

COST, QUANTITIES, AND UNIT COSTS OF PURCHASED FUELS AND ELECTRICITY FOR PENNSYLVANIA MANUFACTURERS
BY INDUSTRY GROUPS, 1977

	Total*	Electricity	Coal	Coke	Fuel Oil	Natural Gas	Propane	Other Fuels+
Total, Pennsylvania								
Cost (thousand dollars)	2,519,509	916,645	216,018	241,367	524,117	503,777	25,515	92,071
Quantity☆	–	32,129	6,827	4,148	34,616	253	66,792	–
Average Cost (dollars per unit)	–	28.5	31.6	58.2	15.1	1.9	0.3	–
Food & Kindred Products								
Cost	150,896	59,098	2,389	5	62,172	18,500	2,545	6,187
Quantity	–	1,683	58	0	4,000	8	6,855	–
Average Cost	–	35.1	41.0	15.6	15.5	2.3	0.3	–
Tobacco Manufacturers								
Cost	2,234	1,104	0	0	1,059	69	3	0
Quantity	–	34	0	0	72	0	8	–
Average Cost	–	32.0	0.0	0.0	14.7	2.1	0.3	–
Textile Mill Products								
Cost	52,985	21,335	578	0	23,193	4,192	1,012	2,674
Quantity	–	656	17	0	1,502	2	2,587	–
Average Cost	–	32.5	33.3	0.0	15.4	2.5	0.3	–
Apparel & Other Finished Products								
Cost	29,681	13,650	782	0	10,436	2,986	349	1,477
Quantity	–	293	4	0	573	1	682	–
Average Cost	–	46.6	186.2	0.0	18.2	2.5	0.5	–
Lumber & Wood Products								
Cost	16,908	7,382	119	0	4,856	2,305	1,263	983
Quantity	–	223	3	0	285	1	3,210	–
Average Cost	–	33.1	34.9	0.0	17.0	2.0	0.3	–

—continued—

	Total*	Electricity	Coal	Coke	Fuel Oil	Natural Gas	Propane	Other Fuels+
Furniture & Fixtures								
Cost	10,750	5,610	350	0	2,445	2,143	131	70
Quantity	–	155	10	0	139	1	272	–
Average Cost	–	36.1	35.3	0.0	17.6	2.4	0.4	–
Paper & Allied Products								
Cost	133,633	47,280	16,154	0	52,603	16,304	728	564
Quantity	–	1,767	702	0	3,506	8	1,753	–
Average Cost	–	26.7	23.0	0.0	15.0	2.0	0.4	–
Printing, Publishing & Allied Products								
Cost	30,401	18,424	26	0	5,174	3,355	106	3,316
Quantity	–	488	0	0	280	1	238	–
Average Cost	–	41.1	65.5	0.0	18.4	2.2	0.4	–
Chemicals & Allied Products								
Cost	128,755	48,550	13,681	0	48,725	12,550	2,024	3,225
Quantity	–	1,733	572	0	3,440	6	5,763	–
Average Cost	–	28.0	23.9	0.0	14.1	2.0	0.3	–
Petroleum Refining & Related Industries								
Cost	96,461	36,284	5,737	0	17,698	28,978	190	7,574
Quantity	–	1,290	235	0	1,378	18	536	–
Average Cost	–	28.1	24.4	0.0	12.8	1.6	0.3	–
Rubber & Miscellaneous Products								
Cost	50,714	31,934	1,116	0	12,042	5,432	162	27
Quantity	–	1,047	36	0	798	2	428	–
Average Cost	–	30.4	31.3	0.0	15.1	2.2	0.3	–
Leather & Leather Goods								
Cost	5,850	3,030	702	0	1,635	474	5	4
Quantity	–	80	28	0	102	0	11	–
Average Cost	–	37.9	24.8	0.0	16.0	2.2	0.4	–

—continued—

	Total*	Electricity	Coal	Coke	Fuel Oil	Natural Gas	Propane	Other Fuels+
Stone, Clay, Glass & Concrete Products								
Cost	210,845	63,237	34,250	3,166	33,165	71,733	2,923	2,371
Quantity	–	2,590	1,384	123	2,115	36	7,104	–
Average Cost	–	24.4	24.7	25.7	15.6	1.9	0.4	–
Primary Metal Industries								
Cost	1,180,558	348,344	130,055	233,231	161,649	246,351	4,624	56,305
Quantity	–	13,285	3,404	3,984	11,017	127	12,290	–
Average Cost	–	26.2	38.2	58.5	14.6	1.9	0.3	–
Fabricated Metal Products								
Cost	163,685	66,252	1,299	3,246	38,528	45,351	4,014	4,996
Quantity	–	2,039	31	24	2,346	21	10,817	–
Average Cost	–	32.5	42.1	135.2	16.4	2.1	0.3	–
Machinery Except Electrical								
Cost	89,727	49,857	575	897	18,331	16,627	2,760	681
Quantity	–	1,557	14	7	1,120	7	7,260	–
Average Cost	–	32.0	39.9	133.8	16.3	2.2	0.3	–
Electrical Equipment & Supplies								
Cost	77,124	47,147	2,637	788	11,167	13,747	1,141	498
Quantity	–	1,732	77	9	720	7	2,875	–
Average Cost	–	27.2	34.1	86.5	15.5	2.0	0.4	–
Transportation Equipment								
Cost	54,063	28,956	4,361	35	10,517	7,969	1,155	1,071
Quantity	–	920	216	1	681	3	3,105	–
Average Cost	–	31.4	20.2	69.2	15.4	2.5	0.3	–
Instruments & Related Products								
Cost	14,320	10,091	0	0	2,097	2,000	115	17
Quantity	–	298	0	0	125	1	245	–
Average Cost	–	33.8	0.0	0.0	16.7	2.4	0.4	–

—continued—

	Total*	Electricity	Coal	Coke	Fuel Oil	Natural Gas	Propane	Other Fuels+
Miscellaneous Mfg., Inc.								
Cost	19,923	9,081	1,209	0	6,625	2,711	265	32
Quantity	—	299	35	0	418	1	755	—
Average Cost	—	30.3	30.0	0.0	15.8	2.4	0.3	—

* Data may not sum to totals because of independent rounding.
\+ Other fuels include gasoline, kerosene, steam and all others.
☆ Quantities for fuels are: electricity — million KWH, coal and coke — thousand short tons, fuel oil — thousand barrels, natural gas — million Mcf, propane — thousands of gallons.
— None reported.

REFERENCE: 4

COST, QUANTITIES, AND UNIT COSTS OF PURCHASED FUELS AND ELECTRICITY FOR PENNSYLVANIA MANUFACTURERS

BY UNIFORM REGIONS, PHILADELPHIA AND ALLEGHENY COUNTIES, 1977

Uniform Regions	Total	Electricity	Coal	Coke	Fuel Oil	Natural Gas	Propane	Other Fuels+
Total, Pennsylvania*								
Cost (thousand dollars)	2,519,509	916,645	216,018	241,367	524,117	503,777	25,515	92,071
Quantity☆	—	32,129	6,827	4,148	34,616	253	66,792	—
Average Cost	—	28.5	31.6	58.2	15.1	1.9	0.3	—
Delaware Valley								
Cost	643,095	251,365	34,608	23,087	206,003	99,217	5,614	23,202
Quantity	—	7,365	656	390	13,638	48	15,430	—
Average Cost	—	34.1	52.7	59.1	15.1	2.0	0.3	—
Lehigh Valley								
Cost	193,233	79,599	25,250	6,113	57,204	21,812	1,831	1,424
Quantity	—	2,879	875	67	3,723	8	4,940	—
Average Cost	—	27.6	28.8	91.9	15.3	2.6	0.3	—
Northeastern District								
Cost	91,180	38,411	8,763	477	23,073	17,191	2,172	1,093
Quantity	—	1,309	305	4	1,364	8	5,549	—
Average Cost	—	29.3	28.7	132.3	16.9	2.1	0.3	—
Northern Tier District								
Cost	32,980	16,301	274	1,467	3,457	10,056	1,407	17
Quantity	—	673	11	10	223	6	3,598	—
Average Cost	—	26.0	26.0	141.0	15.4	1.8	0.3	—
Seda Cog District								
Cost	95,807	38,574	10,244	357	23,982	20,016	1,562	1,072
Quantity	—	1,428	452	2	1,530	9	4,127	—
Average Cost	—	27.0	22.6	148.7	15.6	2.3	0.3	—
Capital Region								
Cost	229,626	104,750	13,752	3,533	63,365	34,769	4,887	4,569
Quantity	—	3,757	402	50	4,161	14	12,611	—
Average Cost	—	27.8	34.1	71.0	15.2	2.5	0.3	—

—continued—

	Total	Electricity	Coal	Coke	Fuel Oil	Natural Gas	Propane	Other Fuels+
Southern Alleghenies District								
Cost	47,644	21,662	2,928	138	6,140	14,633	492	1,651
Quantity	—	783	121	1	381	8	1,450	—
Average Cost	—	27.6	24.1	125.7	16.1	1.8	0.3	—
North Central District								
Cost	46,663	18,860	4,452	0	3,664	19,386	244	57
Quantity	—	858	195	0	217	10	570	—
Average Cost	—	21.9	22.7	0.0	16.8	1.8	0.4	—
Northwestern District								
Cost	218,145	62,918	15,213	51,415	24,515	60,879	1,901	1,306
Quantity	—	2,373	791	534	1,686	31	4,673	—
Average Cost	—	26.5	19.2	96.2	14.5	1.9	0.4	—
Southwestern District								
Cost	921,137	284,205	100,535	154,780	112,715	205,818	5,404	57,682
Quantity	—	10,705	3,019	3,089	7,694	112	13,844	—
Average Cost	—	26.5	33.3	50.1	14.6	1.8	0.3	—
Philadelphia County								
Cost	206,720	77,112	21,903	536	79,778	13,398	2,545	11,448
Quantity	—	2,115	378	4	5,145	5	7,133	—
Average Cost	—	36.4	57.9	124.6	15.5	2.5	0.3	—
Allegheny County								
Cost	505,065	159,685	17,806	134,073	50,943	91,999	690	49,869
Quantity	—	5,109	627	2,705	3,539	54	1,603	—
Average Cost	—	31.2	28.3	49.5	14.3	1.7	0.4	—

* Data may not sum to totals because of independent rounding.
\+ Other fuels include gasoline, kerosene, steam and all others.
☆ Quantities for fuels are: electricity — million KWH, coal and coke — thousand short tons, fuel oil — thousand barrels, natural gas — million Mcf, propane — thousands of gallons.
— None reported.

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